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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/847,474	05/02/2001	Guangming Shi	990517	6899

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QUALCOMM INCORPORATED
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EXAMINER	
DAO, MINH D	
ART UNIT	**PAPER NUMBER**
2618	

NOTIFICATION DATE	DELIVERY MODE
12/31/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	09/847,474	SHI ET AL.	
	Examiner	Art Unit	
	MINH D. DAO	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 October 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,9-13,15-19 and 21-48* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,9-13,15-19 and 21-48* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 10/31/07 have been fully considered but they are not persuasive regarding remarks that cited references do not teach "the voice-recognition engine is configured to interpret **single word or multiple word** audio-data as matching a selected one of a set of alphanumeric characters.". Examiner notes that, as indicated in bold-face above, in all independent claims 1,7,13,19,26,29,32,34,40, and 47 use alternating language between two elements "**single word**" or "**multiple word**". Examiner only needs to consider one of the two elements to treat these claims. In this case, the cited reference Kato teach a "**single word**" as indicated in fig. 5, and col. 4, line 55 to col. 6, line 64. And therefore independent claims 1,7,13,19,26,29,32,34,40, and 47 are rejected for this reason.

2. Applicant's arguments filed 10/31/07, with respect to argument that cited references do not teach "a single alphanumeric character". This argument is moot in a new ground(s) of rejection is made in view of Mann (US 6,687,673).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-7,9-13,15-19,21-24,26,29,32,34-37,40,43-45,47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato (US 6,263,202) in view of Levine (US 6,972,082) and further in view of Mann (US 6,687,673).

Regarding claim 1, Kato teaches a system for data entry in a wireless communication device (See figure 5), the system comprising: an audio-input device to receive audio-data (Figure 5, item 40); a voice-recognition engine (figure 5, item 50) to receive and analyze the audio-data, wherein the voice-recognition engine is configured to interpret single word audio-data to use in conjunction with the operation of the wireless communication device (col. 4, lines 55-67; col. 5, lines 1-4; figure 2, items 12 and 14); and a memory to store the selected alphanumeric character for subsequent use in conjunction with the operation of the wireless communication device (figure 5, item 54, 50 and 42). However, Kato fails to teach interpreting the audio-data as matching a selected one of a set of commands, the set of commands comprising at least one command for configuring the voice-recognition engine in interpreting the audio-data; and a processor to execute the command. Levine, in an analogous art, teaches personal assistant system equipped with voice recognition engine to interpret audio input such as audio commands and execute the commands (see col. 4, line 61 to col. 6, line 22). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide the above teaching of Levine to Kato in order for the combined system to allow entry of commands by voice as taught by Levine. It is

also well known in the art that all of the commands are executed by a processor of the system.

Still regarding claim 1, Kato and Levine, do not mention "matching a selected one of a set of alphanumeric characters". Mann teaches Method of performing speech recognition by comparison of single spoken character (see abstract; col. 5, line 8 to col. 10, line 8). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide the above teaching of Mann to Levine and Kato in order ensure the correct spelling of the input word as taught Mann.

Regarding claims 3,35,44 the combination of the teachings of Kato, Levine and Mann teaches that the system of claims 1, 34, 43 further comprising a transmitter to transmit the selected alphanumeric character to a remote location (Reference Kato, figure 2, item 14 and 1205).

Regarding claims 4, and 36, the combination of the teachings of Kato, Levine and Mann teaches that the system of claims 1, and 34 wherein the memory (Reference Kato, figure 5, item 54; col. 6, lines 47-48) stores a plurality of selected alphanumeric characters, the plurality of selected alphanumeric characters comprising at least a portion of an electronic message, the system further comprising a transmitter to transmit the electronic message to a remote location (Reference Kato, col. 4, lines 55-67; col. 5, lines 1-4; figure 2, items 12 and 14).

Regarding claims 5,37,and 45 the combination of the teachings of Kato, Levine and Mann teaches that the system of claims 4, 36, and44 wherein the electronic message is compatible with a short-messaging-service protocol (Reference Kato, figure 2, the Electronic Mail Transmission 1023).

Regarding claims 6 and 18, the combination of the teachings of Kato, Levine and Mann teaches a system wherein the voice-recognition engine is configured to interpret the audio-data as matching a selected one of a set of commands (Reference Levine, col. 4, line 61 to col. 6, line 22) to process the electronic message (Reference Kato, col. 4, lines 55-60), the system further comprising a processor to execute the selected command (Reference Kato, col. 4, lines 55-60).

Regarding claims 7,32, the combination of the teachings of Kato, Levine and Mann teaches system comprising:

a system for storing addresses in a wireless communication device (Reference Kato, see figure 5), the system comprising: an audio-input device to receive audio-data (Reference Kato, Figure 5, item 40); a voice-recognition engine to receive and analyze the audio-data, wherein the voice-recognition engine is configured to interpret single word audio-data as matching a selected one of a set of alphanumeric characters (Reference Kato, col. 4, lines 55-67; col. 5, lines 1-4), a processor to associate an address-identifier with a plurality of selected alphanumeric characters (reference Levine,

col. 4, line 61 to col. 6, line 22); and a memory to store the plurality of selected alphanumeric characters in association with the associated address-identifier wherein the voice-recognition engine is further configured to interpret the audio-data as matching a selected one of a set of commands to process the plurality of selected alphanumeric characters and the associated address-identifier, the processor executing the selected command (reference Levine, col. 4, line 61 to col. 6, line 22). Also see Mann, abstract; col. 5, line 8 to col. 10, line 8.

Regarding claims 9 and 21, the combination of the teachings of Kato, Levine and Mann teaches that the system of claim 7 wherein the plurality of selected alphanumeric characters associated with the address-identifier represents at least part of a destination telephone number (Reference Levine, col. 4, line 61 to col. 6, line 22).

Regarding claims 10 and 22, the combination of the teachings of Kato, Levine and Mann teaches that the system of claim 7 wherein the plurality of selected alphanumeric characters associated with the address-identifier represents at least part of an electronic address (Reference Levine, col. 4, line 61 to col. 6, line 22).

Regarding claims 12 and 24, the combination of the teachings of Kato, Levine and Mann teaches that the system of claim 7 wherein the voice-recognition engine is further configured to interpret the audio-data as the address-identifier (Reference Levine, col. 4, line 61 to col. 6, line 22).

Regarding claims 13,26,29,40,47, the claims have the same limitations as that of claim 1, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 1.

Regarding claim 15, the combination of the teachings of Kato, Levine and Mann teaches that the method of claim 13, further comprising transmitting the selected alphanumeric character to a remote location (Reference Kato, figure 2, item 14 and 1205).

Regarding claim 16, the combination of the teachings of Kato, Levine and Mann teaches that the method of claim 13, further comprising storing a plurality of selected alphanumeric characters (reference Kato, figure 5, item 54; col. 6, lines 47-48), the plurality of selected alphanumeric characters comprising at least a portion of an electronic message, and transmitting the electronic message to a remote location (reference Kato, col. 4, lines 55-67; col. 5, lines 1-4; figure 2, items 12 and 14).

Regarding claim 17, the combination of the teachings of Kato, Levine and Mann teaches that the method of claim 16 wherein the message is compatible with a short-messaging-service protocol (reference Kato, figure 2, the Electronic Mail Transmission 1023).

Regarding claims 19,34,43, the claims include the limitations as that of claims 1, 7, and 13, therefore is interpreted and rejected for the same reason set forth in the rejections of claims 1, 7, and 13.

Regarding claims 11 and 23, the combination of the teachings of Kato, Levine and Mann teaches the plurality of selected alphanumeric characters associated with the address-identifier represents at least part of a street address (see Levine, col. 5, lines 4-10; col. 5, lines 60-67).

1. Claims 25,27,28,30,31,33,39,41,42,46,48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato (US 6,263,202) in view of Levine (US 6,972,082), Mann (US 6,687,673) and further in view of Tsai (US 5,838,458).

Regarding claim 25, the combination of Kato, Levine and Mann, as mentioned above, teaches the limitations of claim 1, but does not disclose that the single word or multiple word audio-data matches a selected one of the group of special characters consisting of !, @, #, $, or %. This limitation is taught by Tsai in an analogous art (see fig. 77; col. 50, line 50 to col. 51, line 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide the above teaching of Tsai to Kato and Levine in order void triple-digit encoding in inputting alphanumeric characters regarding entering an e-mail address as taught by Tsai.

Regarding claims 27,28,30,31,33,39,41,42,46,48, the claims includes the same limitations as that of claim 25, and therefore are interpreted and rejected for the same reason set forth in the rejection of claim 25.

Regarding claim 42, the combination of Kato, Levine, Mann and Tsai teaches a keypad for manual data entry, wherein each key of the keypad corresponds to a plurality of alphanumeric characters (see fig. 77 of Tsai. Also see Mann, abstract; col. 5, line 8 to col. 10, line 8).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MINH D. DAO whose telephone number is 571-272-7851. The examiner can normally be reached on 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MATTHEW ANDERSON can be reached on 571-272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MINH DAO
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